Horticultural Society

MASSACHUSETTS PLOUGHMAN

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AND NEW ENGLAND JOURNAL OF AGRICULTURE.

THE FIRESIDE, RURAL LIFE, LITERATURE, USEFUL ARTS, NEWS, &c.

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Editorial.

THE SUGAR BEET,

including a History of the Beet Sugar Industry in Europe, Varieties of the Sugar Beet, Soils, Seeds and Sowing, Yield and Cost of Cultivation, Harvesting, Feeding Qualities of the Beet, the pulp, &c. By Lewis S. Ware. Philadelphia, Henry Carey, Baird, & Co. Price $4.00. Boston, A. Williams & Co., 283 Washington St., corner of School Street.

It is said that the United States pays an annual tribute to foreign countries of $80,000,000 for sugar. That is a large sum and if we could contrive some way to save it, we should add greatly to the prosperity of the country, and build up an industry that would furnish labor and bread to great numbers of people. Attention is naturally turned to the beet as the source of supply, partly from the fact that it has proved so important in Europe and partly from its well known increase in saccharine matter as compared with most other plants. Whatever throws light upon this plant, therefore, will prove to be of interest and value not only to those who are interested in developing a new and important industry as a commercial enterprise, but also to the great body of farmers who wish to know how to produce the raw material, and to do it intelligently.

We welcome this book, therefore, as a contribution to our knowledge of the plant, seasonably and valuable, and as it bids fair to be some guide to our experiments and investigations. The author had the advantage of a fourteen years' residence in France and Germany, where the beet sugar industry has been more fully developed than anywhere else. If we are to start off intelligently and with a reasonable prospect of success, it is of the utmost importance that we inform ourselves of the details and the results of experiments there. The Europeans have worked out the problem of making sugar of beets. They have met and overcome many obstacles, and we ought to start off with the advantage of knowing what those obstacles are. This is the only way in which we can expect to avoid them economically.

The author has made a study of the different varieties of beet which have been used for sugar making. They contain sugar in varying proportions, and we need to know which has been found to be the best, and it will save us much useless experimenting to know this beforehand. They have found out in Europe, by a long course of study and experimenting, what are the best soils on which to grow the beet for sugar, and this we must know before starting off. We might as well get it from the experience of others, as to try to find out by our own experience. They have found the best modes of tillage also; and unless we take our lessons from them, we go blindly into an industry of which we know comparatively little. They know in Europe, by long experience and with the aid of scientific investigation, what are the best fertilizers to use to give the best results in a high percentage of sugar. It would be unwise and useless in us to ignore the results of their experience in this direction, and we must study the history of the enterprise, and we find it presented to us. The chapters upon the comparative advantages of different fertilizers are not only very valuable in themselves, but of the highest importance to those who are intending to raise beets to be used for sugar making.

And so we might go on particularizing the various points involved in the beet sugar industry which are developed in detail in the volume before us. It is comprehensive, instructive and interesting. We have been rather struck with the entire omission of any allusion to the valuable investigations made in this country. We have always regretted the careful investigations made by Prof. Goessmann, at the Massachusetts Agricultural College, as by far the most complete and exhaustive, and they have the advantage of having been made in our own climate upon our own soils. All these the author appears to have overlooked, and he was probably not aware of their existence. It would have made his book more valuable if he had included them, but it was rather his purpose to present the results of French and German experience as a guide for us.

The price of the book seems rather high. It is a volume of 323 pages, admirably printed on good paper, in fine large type. It contains many illustrations of the varieties of beets, the modes of growth and of storage and preservation. The insects that infest the plant are also described and illustrated at considerable length. All these considerations involve expense. The work is worthy of high commendation, and for those who are to embark in growing sugar beets it seems quite indispensable. It is for sale by A. Williams & Co., who keep a larger assortment of agricultural books than any other store in Boston.

SOME PUMPKINS.

Wilbur F. Proctor, of West Gloucester, Maine, had two pumpkin vines the past season which sprang up from the manure spread upon his beet bed; they produced twenty-five well ripened, old fashioned field pumpkins weighing 458 pounds, an average of eighteen pounds each; heaviest twenty-nine pounds, lightest eleven pounds, eight above twenty pounds each, eleven above fifteen pounds each.

EUROPE'S GREAT QUESTION.

Upon the peaceful or warlike prospects of Europe very greatly depend the prospects of the foreign trade of the United States for some time to come. So long as the European nations keep up their immense armies and armaments, there will be just so much force withdrawn from productive industry, especially from agriculture; and uncertain and insufficient crops will continue to make it necessary for them to look elsewhere for their supplies of food. The news from Berlin in regard to the intention of the German chancellor has fallen "like a thunderbolt" on the cabinets of St. Petersburg and Paris, and has been received with symptoms of positive alarm at the capitols of the other nations. It is to the effect that Bismarck has determined to increase the strength of the German army from the present peace footing of 401,000 men to 427,250 men. The change is not to be effected until April 1881, and is to be continued until March 1888.

This news is the more surprising because of the existing impression that the chancellor's policy was one of disarmament, in which he desired that Germany should set Europe the example. It had likewise been considered that Russia was of late making more peaceful demonstrations toward her neighbors. The subject of standing armies had become one that engaged the attention of Europe, all nations appearing to manifest a desire to be rid of the burden. They have been a nightmare to the hopes of every European nation. If, therefore, so powerful a statesman as Prince Bismarck were seriously to take in hand the abatement of this great nuisance, this drag on civilization and progress, there was hope for a final alleviation from so sore an evil. But this latter announcement by Bismarck of a complete reversal of his supposed policy occasions a shock that can hardly be paralelled by anything but that of an earthquake.

Speculation is almost wholly at fault in discovering the reasons for this surprising decision. A leading public man in Europe, who is credited with holding rather confidential relations with both the cabinets of Berlin and Paris, and who is believed to be particularly well informed relative to Bismarck's designs, says that this increase of Germany is but the first move in a deep-laid plan directed solely against France. It is, he asserts, a significant invitation to France to take part in a law of international and common repression against the Nihilists, Socialists, Internationalists, and other organizations intended to subvert existing governments. These elements, it is claimed, have attained a power that renders combined action on the part of the various cabinets absolutely necessary. Bismarck's ground is, that in such a matter neutrality on the part of any of the great powers is inadmissable Therefore he intends to put Germacy in a condition to demand of France that she shall join against these disorganizing elements.

Should France refuse to cooperate in a crusade against these international societies, Germany will make a formal demand on her for compliance; and an immediate mobilization of German and Austrian armies will take place in accordance with the offensive and defensive alliance which has been entered into by these two empires. The French republicans are hardly expected to uphold the measure in the legislature, but rather to refuse compliance with such a demand. A dissolution of the two Houses may then take place, and the country would go into an election on this issue. Then if a Republican majority were elected, Bismarck's demand would almost of course be refused, and then would follow a war with Germany and Austria allied. The Russian Government would look on well satisfied, knowing that the contest was being waged for itself as well as for Germany.

But there is a statement supplementary to this which should go with it, to the effect that "if France shall pass the law of repression and undertake its vigorous enforcement, Germany will at once take the initiative in a general disarmament, which will relieve her of her burden of taxation, secure internal tranquility, and perfect the somewhat doubtful friendship of Russia. All this may possibly be in the programme, and its chief merit is that it would in the end render the purposes of Bismarck, as imputed to him, practically consistent. But there is something more to be said in the case than is contained in the above allegations.

There is a deep-seated hostility existing between the German and the Sclave, which has been growing more intense since the Berlin conference, and has taken every opportunity to find expression. The menacing attitude recently assumed by Russia on the Austrian and German frontier has not been without a marked effect on the German mind. The German people have not by any means been indifferent to what was going on, however silent they might be. They dread the approach of the power of Pansclavism, and are ready at all times to resist its aggressive tendencies.

So that this increase of the German armies may mean a determination to resist the ambitious and active power that is looming up on the east, rather than a desperate scheme to force France into an armed alliance to put down Nihilism and Socialism and their kindred associations. Germany, through Bismarck, may mean, and probably does mean, to force Russia to remove her armies from the Western frontier, and likewise to explain the reason of their having been stationed there. This is probably the original purpose of Bismarck in making this movement; there is no doubt a secondary one, namely, a desire to keep a close watch on growing France, whose rapid recovery from the serious wounds of the war with Germany just ten years ago is one of the marvels of the age, and the steady consolidation of whose republicanism is a moral menace to the existence of the German Empire.

These are all of them political considerations in the case. The others are calculated to excite only profound regret that the continental nations of Europe—Germany, France, Italy, Austria, Russia—should feel obligated to live in a state of armed neutrality, thus withdrawing the very sinews of their being from peaceful and productive industry, and maintaining ourdens under which the populations groan in unison. It is a burden that will be felt heavily from one end of the continent to another. No nation will be a greater sufferer than Germany herself. The Empire is a costly luxury for her people. Now it proposes to take for soldiers one man out of every hundred, or one per cent. of the population. Germany is thus not nearly so well off as she was in 1866. She may have an Emperor, but the people are not free. They are oppressed with numerous burdens, and the last one proposed may prove to be a heavier one than she will long bear in patient submissiveness.

SHEEP VS. DOGS.

The number of sheep kept in Massachusetts in the year 1865 was 160,997; the number in the year 1875, 58,595, a decrease of 102,402. The number of acres of unimproved land, not including unimprovable land, in the year 1865 was 1,019,343; in the year 1875, 1,469,988. Thus in ten years 450,645 acres of land passed from improved to unimproved land, while the amount of cultivated land remained about the same, being 881,402 in the year 1865, and 912,521 in 1875.

The number of licensed dogs in the year 1862 was 21,385, and the estimated number of unlicensed dogs was 12,640, making the total number of dogs in the State 34,025. The number of dogs licensed in the year 1878 was 53,828, and the number of unlicensed dogs is estimated sufficient to make the whole number in the State 65,000. The amount paid to sheep owners for damage done by dogs in the year 1878 was $10,608.

Thus the statistics show that the enactment of a dog law, to protect sheep husbandry, has not only failed to accomplish the object for which it was enacted, but it has greatly increased the number of dogs, and nearly annihilated the sheep. This fact, so patent to every intelligent person, seems to make no impression on Legislatures. As a rule, when Legislatures find that a law destroys what it is intended to build up, they repeal or change it; but for some reason the farmers seem to be powerless to secure any change in the dog law, notwithstanding it has failed to accomplish the object intended.

It is evident enough that if this law is kept in force a few years longer, sheep raising in the State will dwindle down to a few flocks, kept by those who have the means to enclose their farms with a fence over which the dogs cannot pass.

Those who have given the subject but little thought may wonder why the taxing of dogs should increase their numbers, and at the same time decrease the number of sheep; but a careful investigation will satisfy every unprejudiced person that it is so. When dogs were not taxed, and run at large with no protection by law, their lives were not only always in danger, but the owners were in continual fear of being prosecuted by sheep raisers; but now a dog owner, after paying his two dollars, feels that his dog is protected by law, and that he has a right to trample over every woman's flower-bed, and every man's kitchen garden; to wash the face and frighten every child on its way to school; to bark at the heels of every man, and at the nose of every horse that travels the public highway; that they have the right to follow their master through all public thoroughfares and private grounds, dodge into every door yard, and up the front steps of every house, and commit the most unpardonable nuisances. In fact dog owners claim rights for their dogs that are not enjoyed by even the highest officials of the State.

The farmer who has a sheep killed or wounded goes to the county for pay out of the dog fund, and the owner of the dog though known, is seldom if ever called upon by the farmer or the county to pay anything. Thus the dogs get more rights, and the owners have less fear of being required to pay damages, than before the passage of a license law.

The fact that the farmer gets pay for the sheep killed or wounded, amounts to but little as a protection in sheep raising. To make sheep raising both pleasant and profitable, the sheep must be quiet, and of a breed adapted to the soil and location. These qualities can only be obtained by each farmer raising his own lambs. This in many portions of the State under the present dog law is an impossibility. The dogs are so numerous that there are but few locations where a flock of sheep can be kept more than a single year, or at most, two years. A single dog will oftentimes thoroughly demoralize a flock of fifty sheep in a few hours; perhaps he will kill one, and wound two; and the county will pay the farmer possibly fifteen dollars, when his real loss is perhaps one hundred and fifty or two hundred dollars, and if a valuable breed of sheep, even more. A flock of sheep once frightened by dogs are worthless, except for the butcher; they will never afterwards quietly feed in the same pasture, and the farmer is obliged to sell them for the most he can get; if he is to continue the business he must go into the market and buy such as he can find, and as a rule pay high prices, or buy twice as many as he wants that he may pick out the best and sell the poor ones, at low prices. This constant changing of flocks not only makes it unprofitable, but also unpleasant; the farmer gets discouraged and abandons the business. If the farmers could have the same rights that the dog owners take, they could by paying a small tax on their cattle and sheep, turn them into the gardens and fields of dog owners. Would owners of dogs agree to this? yet if one law is right, and constitutional, why would not the other be? Who would not rather have a sheep around his house, than a mad dog? Would not the principal portion of non dog owners rather have a sheep in their pathway, than a dog, *mad* or *pleased*? Then why pass a law which gives every man the right to keep as many worthless curs as he can pay tax on, to run at large, endangering the lives of not only the innocent sheep of the farmer, but frightening the children and endangering the lives of all classes.

Is it not about time for legislators to open their eyes to the fact that we have a law contrary to the fundamental principles upon which our Government is founded? if it is not class legislation, what is class legislation? It certainly gives one class rights over another class, that not only does not benefit, but greatly injures the public. It would seem in a free country like this, where individual rights are supposed to be protected by law, that a farmer owning a tract of land, well fenced, ought to have the privilege of keeping sheep, if he keeps them on his own land; certainly he should not be deprived of this right by a law which gives the dogs more rights than the sheep.

If the Legislature would pass a law giving the sheep the same rights that the dog owners claim under the present dog law, a year or two would convince the masses that the dogs have been a favored class.

The question arises, if our present dog law is not what it should be, what law would accomplish the desired object?

Let a law be passed treating dogs like other animals, compelling the owners to keep them on their own premises, subject to proper penalties if they fail to do so; should this prove to be insufficient, then require every dog owner to give sufficient bonds to keep his dog at home, and if he neglects to do so, to forfeit the bonds.

The fact that nearly half a million acres of land in ten years has passed from improved to unimproved land, on account of the rapid increase of worthless curs, ought to be sufficient to arouse the farmers to a united action, demanding a law which shall protect their sheep from dogs.

WALTHAM FARMER'S CLUB.

[Reported for the Massachusetts Ploughman.]

Editor Massachusetts Ploughman.

The eighth meeting of the Waltham Farmers' Club was held on Tuesday evening last, at the residence of Rev. T. F. Fales, and despite the rain, a good number was present.

The topic of the evening was "How can mental Culture aid the Farmer in his Occupation?" Leaders, A. B. Berry, Rev. M. R. Leonard, E. W. Lane, and Dr. E. R. Cutler.

Rev. Mr. Leonard—In the past and at the present time also there is a restless, impatient spirit among farmers everywhere. They are dissatisfied with their position. They think themselves left behind the rest of the world in all that makes life attractive, and partaking of this spirit the young men hasten to leave what is considered a stupid, dull, insipid life on the farm, and hurry off to some city, or large town, to enter some profession, mechanical or mercantile pursuit. This state of things has continued till the country is drained and the cities are full to overflowing with men to whom there has come of necessity a desperate scramble for life and the means of maintaining a position in society. The professions are crowded; mercantile business is overdone, and mechanics are often out of employment. At the same time the country is empty and the great need is for farmers to till the land which is lying idle. Now what is wanted is to return this tide from the city to the country. Thousands in our cities and large towns must return to the culture of the soil to save themselves from want and crime.

One of the great questions of the day is how best to restore the lost equilibrium between the city and the country, and benefit not only the farmer but the whole country. The answer to this it seems to me is by improving the mental culture of the farmer. Let him learn that his lot is not a mean, low, insipid one, but is the most happy, or can be made so, of any in the community, and any farmer can make it so who becomes sufficiently intelligent through mental culture to make the most of his position and calling, and develop all of its possibilities. It will then be found that farming is one of the most successful and remunerative pursuits that a man can enter upon. The trouble has been that farmers have failed to use that degree of shrewdness, tact, calculation and care in his business that men of other pursuits have had to wring from them the golden returns they have obtained. Mental culture of a thorough practical character which shall lead farmers to manage their farms as the lawyer, physician or merchant does his to read, study and prepare for it, and leave nothing to run to waste and to overlook nothing, then farming will be found to pay. And when a farmer has a mental culture that shall cause him to find more pleasure and satisfaction in staying at home and reading books and the attractive and valuable periodicals of the day, both literary and scientific, as well as agricultural, instead of spending his rainy days and long winter evenings at the grocery store, post office, or elsewhere, he will find farm life far from a dull, stupid and insipid one.

As now managed, many farms are rendering their owners poorer every year, which if properly managed would give their owners a handsome income yearly. In the neighborhood of my native town in northern New York, to which place I occasionally return, I see how the fertilizers of their barn-yards are wasted, and yet the farmers complain that their lot is a hard one. No doubt it is; but it is owing to their own management. The barnyards of such farmers are so arranged that the manure made by their large stocks of cattle is nearly wasted. The liquid part is left to run entirely to waste. The more solid part is thrown out through a hole in the barn, to be under the droppings from the roofs of the barns and sheds, where it is washed with every rain and thaw till it is leached almost to worthlessness. Often it is left where it is thrown in the winter through the whole summer, then carted off the next fall.

What other business man would avoid bankruptcy and ruin that managed his affairs in this way? What I have seen in northern New York I have seen to some extent about here, and this kind of farming prevails more or less through the country. Now when all this shall be changed, and young men shall learn that the place to achieve and obtain respectability, and most surely to secure to himself an attractive and happy home is in the country on a farm, then this stampeed from the country and from the farm will cease.

What little mental culture I have, I have obtained since leaving the farm at twenty-one; and I am sure this mental culture would not unfit me for the labor of the farm. By it I am able to see how fortunate the life of the farmer might be, and how by the application which I find men give to all other pursuits the farmer could make farming pay and make life a success.

Mr. Lane read an ably written essay, the length of which prevents its insertion in full and of which it is difficult to give an abstract that shall do it justice. He likened the early efforts to elevate farming from the low places it seems to have occupied as a calling among most ancient people, to the first glimmer of light discovered by the wakeful searcher for a new world tossed on the untraversed ocean which caught his eye at midnight as he watched, while all others around him slept. It is scarcely a hundred years, says Mr. Lane, since the idea of intellectual improvement of agriculturists was scorned and its advocates derided as worse than dreamers. The first experiment of a higher education and a grander end for agriculture and humanity was situated in a town of Switzerland-Hofrayal. From this germ have sprung the Agricultural schools and colleges of our own land. But to perfect the cultivation of the soil his mind must first be cultivated and drawn out to comprehend the greatness and the importance of his work. No partial culture could accomplish this, for no class of men are called to deal with such variety of powers and forces whose hidden springs lie deep within the mysteries of nature.

The highest learning and skill are found valuable aids in the prosecution of the professions, and if culture is available to such, how can it be that it is of little or no value to him who has to do with nature in all its forms and moods. Such a notion is preposterous. The more extensive his culture of the intellect the more successful his efforts. It is the farmer that is without intellectual improvement who is given to deplore his lot and complain of the unprofitableness of his vocation.

Dr. Cutler—I have been wholly unable to provide myself with a written essay for this occasion, and hardly to give the subject thought. As suggested by the rude implements of agriculture before us, the implements of agriculture of all ages till the present have been but clumsy affairs. Ingenuity which manifested itself in the production of finished implements of warfare and architecture, seemed not to have given thought to the improvement of the implements of the most useful of all arts. In works of the imagination, in sculpture and painting, the human mind was cultivated to the last degree, even among the ancients, and when at a later period, when after the dark ages the arts revived and the art of printing was invented, and the mind of the race awoke from its long lethargy.

Dr. Willis—Thought that mental culture not compatible with physical labor, and that as the mind becomes cultivated there is less and less inclination to hard labor, such as is required on the farm.

The President differed with Dr. Willis. He thought that with the present improved machinery for farming, the hard labor was mostly dispensed with, and that the more the mind of the farmer was cultivated the more easily he would accomplish the work, and beside that, brain work was more needful on the farm at present than formerly, and that the practical farmer will accomplish most by directing others in his work than by actual labor himself.

General Banks—I agree in great measure with Dr. Willis. A man who is engaged in hard manual labor finds little inclination for mental culture. But just what is meant here by mental culture I do not fully understand. It has not been mental culture which has accomplished most in improving the condition of the world. When a younger man, I worked for months by the side of a stupid fellow who was never suspected of mental culture, and yet he it was who invented the machinery that set in motion the great cotton interest now so important in the world. And a Yankee schoolmaster in no way connected with cotton raising at the South, invented the cotton gin, and thus rendered it possible to supply the cotton to the manufacturer. The electric telegraph was invented by a portrait painter of this vicinity, and not by an electrician or man of science, and the machinery for the manufacture of hair cloth was invented by an apothecary clerk. It is hope, faith, in the man, of accomplishing something, that makes a man or a class of men available in the world. The trouble with the farmers, as a class is, they have not this hope; they feel themselves bound to a life of toil and drudgery.

"BUNCHES ON THE KNEE."

Editor Massachusetts Ploughman:

Your correspondent C. H. C. in the *Ploughman* of Jan. 17, can find a very simple remedy in kerosene oil, liberally applied two or three times. I have cured three or four of my animals when the soft bunches begun to form. I once sold a valuable cow to a gentleman that kept but one cow. After a time she had a large bunch on one knee; as I was asked to look at her I found it well lubricated with train oil, which some one had recommended. I gave them my remedy; they tried both, and she was cured and is now as well as ever. I had one come on a young cow which had been turned off to pasture. When she came to the barn with her little calf, I found the bunch large and soft; and I cut it open, but the leg swelled badly and she was lame and decreased in her milk, but it finally went off. The cause, as we have been advised years ago from the *Ploughman*, is lying upon the hard floor. I bed heavily with meadow hay, but find it bare very often under their front feet. I tie up winter and summer, and have had only a few cases of bunches in the last ten years, with fifteen or twenty cows; they are more apt to come on Jersey and Jersey grades.

C. E. D.

Chestnut Hill, Jan. 28, 1880.

☞ Warm the bit on your bridle in frosty weather, before putting it in the horse's mouth. The bit full of frost, coming in contact with the tongue and lips, adheres to these soft tissues the same as it would do when red hot, leaving the animal with a sore mouth. If you do not believe it, place your own tongue on a piece of frosted iron some cold morning, and be convinced.

☞ The flow of milk is sometimes quite suddenly diminished and checked by exposure of cows without proper shelter in sudden changes of temperature in winter.

WILSON'S SNIPE.—Gallinago Wilsonii—(Bonaparte.)

The Wilson's Snipe, or The English Snipe as it is often, though improperly called, is one of the most generally distributed of our waders being found in almost every portion of the Union at some period of the year.

It is found in the lowlands of the southern States during the winter months, and in some localities is very abundant.

The Snipe forms a loose nest of grass and a few leaves, on the ground, in a bog or wet swampy thicket; and, about the first week in May, the female lays three or four eggs. These are more pyriform in shape than the preceding, and average about 1.44 by 1.15 inch in dimensions. Their color is an olivaceous-drab, marked with spots of brown, which are, at the greater end, confluent into blotches, which almost entirely hide the ground-color.

The Snipe has been known to breed in Massachusetts; but the occurrence is very rare, and can be regarded only as accidental. It breeds in Maine and further north, and in Wisconsin and other western States of that latitude it breeds not uncommonly. By the 25th of August, it returns to the meadows of New England in small parties of three or four; but it is not abundant much before the 10th or 15th of September, and then is not found in great numbers, unless we have had two or three sharp frosts.

—E. A. Samuels, *in Town and Country.*

Stock Department.

HOW TO FEED COARSE FODDER.

[Lewiston Journal.]

Every farmer has more or less of coarse fodder, such as straw, corn-stalks, meadow hay, and the like, which he is sometimes puzzled to know how to dispose of to advantage. If fed to cows, they soon shrink in milk, and fall out of condition, and it seems hardly profitable to dispose of it in that way. If fed to young stock, they will just make out to live, and possibly hold their own, but usually they fall off in flesh, and it seems doubtful economy to feed them in this way. If fed to sheep they scarcely make out to exist under such treatment, some perhaps dying and others falling out of condition to such an extent as to greatly, for the season, injure their usefulness and profitableness. In fact, if fed to any kind of farm stock, there are decided disadvantages attending the practice, and the question how to best dispose of the coarse fodder on the farm, is quite frequently an ever recurring perplexity to the farmer.

There are ways, however, we think, in which the coarse fodder of the farm may be economically and judiciously disposed of. The chemical analysis of straw, corn-fodder, meadow-hay and such articles show that to a certain extent they are incomplete foods, or in other words do not contain a sufficient amount or in the right proportion, all the elements of food required for the proper nourishment of animals. The straw and the corn fodder have had the grain removed, and are left in an incomplete condition for food, and when fed should have the deficiency supplied. This can be done to the best advantage by adding cotton-seed meal to the straw and stalks, in this way supplying the deficiency in nitro-genous and fatty elements. The cotton seed meal is very rich in nitrogenous and fatty elements, and offer the most economical means of making the straw, corn stalk and meadow hay equal in feeding value to thie best of hay. If only half a pint to a pint of the meal is fed daily to young stock, a decided improvement will be noticeable. At first it would probably have to be mixed with bran or corn meal to induce the animals to eat it but they will soon relish it.

Some farmers may think that they cannot afford to buy cotton seed meal to feed with their coarse fodder, but if they will try it one season, they will be likely to conclude that they cannot afford to get along without buying it. The gain on the stock will amply pay the cost, and the increased value of the dressing will repay it again. The fertilizing elements of cotton seed meal are worth the full market price of the meal, and affords the cheapest fertilizer in the market. So, that really the man who buys it has its full value in the dressing made, and gets the increase on the stock as clear gain.

TRAINING HEIFERS.

[Western Rural.]

It is a very easy matter to train a heifer to stand quietly to be milked, but it is an easier matter to train them to jump, kick and run. The way to teach them to stand still is to always require them to do so. The way to teach them the contrary is to give them a good opportunity for doing so. If there is naught to hinder a wild heifer from running, and if her fears prompt her to run, she can and will run. On the contrary, if she cannot run, in a short time she loses her fear; and stands from habit, and habit is one of the most powerful influences in this world for either brute or man.

If you want to transform a wild heifer into a well-behaved, well-trained cow, you must be patient, and exhibit no temper. Never strike or kick her. She must first of all get acquainted with you, and learn that you will not hurt her. She must learn not to fear you. If, in winter, it is best to milk in the stable, make as little fuss and as few alarming motions as possible. Handle her very gently. Be careful not to pinch the teats. This is the great source of trouble. A cow naturally wishes to be rid of her milk. She stands quietly until some careless milker has given a squeeze that hurts, when she kicks and runs. By allowing such a course a few times, the habit will be confirmed.

The best way to manage if you have no stable, is to have a small, well-fenced yard, and teach your heifers to stand for milking in that; or, next best, to tie them, using them very quietly.

No man or boy is fit to handle animals unless he can control them, and control himself. Neither is it right to chastise the ignorant.

AN AGRICULTURAL CREED.

The agriculturists of Canada met in convention not long ago, and adopted for themselves the following creed:

We believe that the soil lives to eat, as well as the owner, and ought therefore to be well manured.

We believe in going to the bottom of things, and therefore deep ploughing, and enough of it. All the better if it be a subsoil plough.

We believe in large crops which leave the land better than they found it, making both the farm and the farmer rich at once.

We believe that every farm should own a good farmer.

We believe that the fertilizer of any soil is a spirit of industry, enterprise, and intelligence; without these, lime, gypsum and guano would be of little use.

We believe in good fences, good farm houses, good orchards, and good children enough to gather the fruit.

The Poultry Interest.

THE BRONZE TURKEY.

[American Poultry Journal.]

There are several distinct breeds of turkeys recognized by the Standard and made specialties of by breeders, but we know of none which have given more general satisfaction than the pure-bred Bronze. Under ordinarily favorable conditions, it is hardy and easy to raise, and will under the same management attain heavier weights, this latter being a quality considered very desirable by many breeders. The large size and handsome bronze colorings of the Bronze turkeys have been derived from the Wild turkey, and there are some few of our turkey breeders, who, every two or three years, introduce a gobbler of the wild stock into their flocks, thus increasing not only the stamina, but the size and attractive colorings. The color will, without this, gradually pale and lose its intensity, its brilliancy. By hatching early, feeding liberally and regularly and by a careful selection of the best and largest for breeders, the size can be kept up or considerably increased. Selection and proper mating has much to do, no doubt, with preventing a decline in the coloring, but it cannot always be maintained in those ways.

HINTS AND ITEMS.

[Fanny Field in Prairie Farmer.]

"In mating your fowls for next season's breeding, do not coop too many hens with one cock, or you will have sterile eggs." Well, most people know that much about poultry breeding, but every body does not know that *too few* hens with one cock is just as bad, if not worse. The rooster business is frequently overdone.

There is a great deal of interest manifested in artificial incubators, and judging from the inquiries for incubators, I should say that fully one-half of the adult population of the United States intend to go into the poultry business during the coming season.

A Connecticut man is the fortunate owner of Black Cochins hatched in 1879, that weighed 10 1-4 pounds each, December 15.

Don't be afraid of feeding your laying hens during cold weather, more hens suffer from under-feeding than over-feeding. It takes a good deal of food to keep up animal heat, and provide the material for eggs.

There is nothing that fowls will devour more greedily than raw bone when it is broken into bits. Mills that will break up bones can be had for a few dollars.

It is a good idea to prepare chicken coops, and nest boxes for sitting hens now.

When gravel cannot be obtained for fowls, old earthenware broken into bits of suitable size will answer every purpose.

An enterprising Massachusetts girl is rejoicing over a clutch of chickens that made their appearance on New Year's day.

DRAINING LOW LANDS.

[N. Y. Times.]

A convenient method is to dig out a broad drain 3 or 4 feet deep from the highest to the lowest part of the swamp. The muck may be thrown out upon the bank upon one side only either in a continuous row or in heaps; the latter is a better way, as it offers no obstruction to the escape of surface water into the ditch. After this ditch is finished others may be dug from it to intersect any low places that are softer or wetter than others, or to cut springs, or in case there is no special need for any particular direction for the drains, they may be laid out at right angles with the main drain, and at distances of from 60 to 100 feet apart. A drain three feet deep and six feet wide will yield more than a ton to the running yard, and 100 loads can be procured from 100 yards of ditch. The muck can be dug by contract at 15 to 20 cents a yard, or less if it is free from water and not filled with roots. A cubic yard of fresh muck free from sand weighs about 1,600 pounds, and two yards will weigh a ton after having been dried for two months, but two yards will have shrunk to two-thirds or one-half that bulk during the drying.

Muck may be used for bedding, for which purpose it is cool and very absorbent. The manure thus made is fine, and may be spread with the harrow. During the fermentation with the droppings of the cattle it is decomposed, and adds an equal value, at least, to the manure. It may be used very liberally, so as to absorb perfectly all the liquids from the animals, and in doing this it will effect a most valuable service. After one year's constant use of it we are enabled to speak positively as to the convenience of this substance and its great economy as a means of saving liquid manure.

It may be thrown into the yards to form a substratum for the accumulation of manure during the winter, and into manure-cellars as a disinfectant and absorbent of disagreeable odors. As the manure accumulates, it may be drawn out and spread upon the fields during the winter with advantage. In addition, it may be composed with refuse lime or wood ashes with great advantage, in which condition it will be of great service as a top-dressing for meadows and pastures. The coarse fibrous portions and the seds and tussocks from the surface may be thus disposed of. Fortunately, there are many farms which have more or less muck upon them, or are so situated that the owner could procure a supply for the digging of it, or making the drains for his less enterprising neighbor.

☞ We note an increased disposition to purchase New England farms, and it is the opinion of those who are in the best position to judge, that this class of property is certain to improve in price during the next few years.—*Farmer's Home Journal, Louisville, Ky.*

Correspondence.

FERTILIZING AND MULCHING TREES.

Editor Massachusetts Ploughman:

The frequent failure of the fruit crop, especially that of apples, in many parts of the country, is doubtless owing in a great measure, to a want of manure. It would be folly to expect large crops of vegetables, if the soil in which they might grow, was not more frequently enriched than the orchards, about which we hear so much complaint. And yet the inevitable conclusion must be either that farmers expect fruit crops without enriching the soil, or that they *cannot* or *will not* provide it, in reasonable quantities.

Where the cultivated crops require all the fertilizing material that the barnyard and other ordinary sources can furnish, is there no other supply or substitute to be found for the fruit trees?

In reply to this question, we desire to make a few suggestions, and first in regard to

APPLE TREES.

We propose, then, for experiment, that all farmers, who are willing to make the trial, take immediate measures, to preserve in tanks, or other vessels, all the otherwise wasted liquid manure, until the frost is out of the ground in spring. Then collect from all available sources, the leaves of forest, or other trees. Now with the plough, mattock or spade, remove the soil from beneath, or around the fruit trees, making the excavations saucer-shaped and extending outwardly, three-fourths as far as the longest branches. Fill these saucer-shaped excavations full of leaves, putting a larger quantity near the trunk or body of the tree. Then the liquid may be applied till the leaves are saturated; afterwards, the soil which was removed around the trunk of the trees, should be replaced upside down, if in the form of turf, as grass or weeds might soon spring up. A second application of the *liquid* should be made in the course of a week or ten days, if the supply will warrant it. Taking Prof. Johnston's opinions, as good authority, we may safely say that few apple or pear orchards within a distance of twelve miles of large villages or cities need ever fail of an abundant supply of this valuable fertilizer.

Many are the advantages to be derived from this method of treating fruit trees. It will help to eradicate the wrong impressions that fruit trees do not need fertilizing as well as vegetable crops. It will remove, also, the objection, "we cannot do it for want of manure." It will afford profit and recreation to the man that has but few trees, as really as to him who can count them by hundreds. It may do something, possibly *much*, to aid the trees in producting a fair *annual* crop, instead of giving us a superabundance one year, and hardly any the next.

Much might be written on this subject, and we hope that every lover of healthy and delicious fruits may take a deep and permanent interest in correcting errors, and establishing right principles and views in farming communities on this subject.

But mulching trees has a wider range still—and applies with an almost equal force to that class which we call

ORNAMENTAL TREES.

It scarcely matters which way you take a drive through most parts of New England even, you will see hundreds of these trees, wilting, dying, or "the places that once knew them knowing them no more!" Ornamental trees along the highway and on *outskirts* as well as *in the streets* of our villages and small cities, should be mulched, if not with any *enriching* material, at least with *sawdust*, which is an excellent protection against drought. One drenching shower, if the depth of the sawdust be considerable, will keep it moist four or five weeks. Almost anything is better than nothing. It is believed that millions of elegant elms and charming maples and ash trees would thus grace the streets of New England villages and towns, where now there are scarcely any. And that along our public roads, millions more would present most delightful summer scenery. By way of contrast, and especially as a winter charm, the pine, the fir tree, and hemlock might add their beauty, where the soils are not rich enough for the elm or maple. That "mighty dollar," which serves as blinders, *not* for our *horses*, would come quite as surely and quickly from created beauty on our farms and along our roads, as by the methods now in use.

A. M. P.

GRASS.

[Kansas Farmer.]

Men who have large farms are too often tempted to put more acres in ploughed crops than can be got in in season, well cultivated while growing or if the soil is thin more land is ploughed and planted than can be properly manured to insure a full return for labor expended. This kind of enterprise and industry is not directed by good judgment. A small acreage well cultivated and planted in proper season, yields more bushels than a much larger extent badly prepared, planted out of season, and but indifferently cultivated while the crops are growing. In one case the farmer drives his work and makes a profit; in the other the work drives him, his yield is generally poor, and he can scarce make both ends meet.

Grass is the sheet anchor of farming. If the land is thin and lies in grass, the grass being allowed to fall and mulch and shade the ground while it rots, the soil is improved more cheaply than by any other mode. If a farm is large and the owner has not sufficient force or capital to farm it all, he should turn the parts into grass that are not used for cultivated crops, and when his rotation brings him round to these sod covered fields he will grow immense crops of grain from them. A close grass sod is the best subduer of weeds that can be introduced on a farm. A heavy coat of grass protects the ground from the frosts of winter and the scorching sun of summer, keeping it mellow, moist and fertile, and preserving the soil in that condition, which is most admirable, returning the heaviest crops when drawn upon by the farmer. Grass is the farmer's best friend, but few there be who seem to have discovered this fact.

☞ A meat diet is essential to the well-being of all fowls during the cold weather, when worms and insects are not to be found by the birds. This is a well-known fact, though but few give the matter the attention it deserves at their hands. An exclusive meat diet is as bad, if not worse, than giving the birds none, for it

member the beans, brown bread, and Indian pudding from the old brick oven, and sigh for the clam-bakes of Narragansett Bay.—Who of them all would be so base as to admit that the richest dish of oysters at Cape May equals the smoking clams from hot rocks covered with fresh sea weed at Rocky Point! And yet the Yankees are a restless crowd. They go everywhere. They do everything. They make dictionaries, patent medicines and hair dyes—lawyers, members of Congress, and prize packages of canly. Philadelphia beats Boston in making doctors and bogus diplomas, but Boston doctors are found where Philadelphia doctors are never heard of, and Yankee peddlers and travelling agents when their stock gives out set up as M. D.'s on Dr. Buchanan's diplomas.

But all this is neither here nor there. Like the Widow Bedott I don't believe in folks "meandering," and yet, like that old soul, I have fallen into it this time. Please excuse me. About the Parsonage Farm. I've read the *Ploughman* diligently for six years to improve it. 'Have followed its counsel when I could. Have read all the books on farming that I could procure. Have kept horses, cows and hogs,—hens, ducks and turkeys,—made all the manure practicable, bought all the fertilizers and feed I could find money to pay for, have kept a farm record of farm operations and results, have studied up all the farms around me,have kept an account of receipts and expenditures, have discovered many mistakes from year to year, have increased the productiveness of my land, (mine until the people want another minister), have bought some of my experience at heavy price for tuition, have increased my crops five fold, and why shouldn't I tell what I know about farming? If you print this I'll begin on Potatoes—or—Fertilizers—or—something else. COUNTRY PARSON.

Pennsylvania, Jan. 1880.

The Ploughman

BOSTON, SATURDAY, FEB. 7, 1880.

Annual Meeting of the New England Agricultural Society.—The farmers of New England were never subjected to a better test for expression of interest in the New England Agricultural Society, than they had opportunity to manifest on Tuesday last. The wind blew a gale from the South East from early in the morning; the air was filled to blindness with falling snow flakes, which were piled in drifts in street, on sidewalk and everywhere on the great thoroughfares for horse or steam power.

Yet, in defiance of this most repulsive and uninviting aspect of nature, the farmers gathered at the New England Agricultural Hall, No. 45 Milk Street, Boston, to attend the annual meeting in very large numbers.

More than a hundred members could be counted who were present from Maine, New Hampshire, Vermont and Connecticut—Massachusetts was by no means backward in her representation and more than sixty arrived from Worcester County and western Massachusetts by the Modoc train, which is due in Boston about eleven o'clock in the forenoon. Such a manifestation of interest in the midst of the most terrific storm which has visited New England this winter, must indeed be gratifying to the officers of the Society, and bespeaks for the organization many years of prosperity and usefulness.

We cangratulate the Society that its management has so universally met the approbation of the Agricultural public—and that its meeting, large and enthusiastic as it was, numbering between two and three hundred, was characterized by the most perfect harmony.

We give a phonographic report of the meeting in our columns to-day which we doubt not will be read with great interest.

Mr. George Walker, of New York, has been nominated by the President as Consul-General at Paris.

The Eastern convocation of Episcopal churches began last Tuesday evening in the church of the Advent, in this city, and continued through Wednesday.

A circular issued by the Secretary of the Treasury calls for proposals for the sale of United States bonds to the amount of $11,000,000, to be applied to the sinking fund.

The wintry storm of Tuesday raged over a wide extent of territory, north and south, east and west. It was particularly severe along the coast. The Canadian weather prophet is fully vindicated.

The annual festival of the Waltham Farmers' Club was necessarily postponed, because of the inability of the Boston caterer to get the feast through the snow drifts that had just been piled up along the way.

Henry V. Poor, the well-known railway statistician and expert, was before the Ways and Means Committee of Congress on Tuesday, and advocated a reduction of the duty on street rails i nso effective a manner that it is thought the committee will report favorably on the subject.

Despatches from Denver, Colorado, state that the Ute Indians attacked a valuable Government supply train, on the 27th of January, but were repulsed with but trifling loss to the troops. Gen. Morrow is in close pursuit of Victoria's band, and feels confident that he will overtake and punish them.

CONGRESS.

In the Senate, Mr. Bayard presented an adverse report on the Warner silver bill. Mr. Beck, of the finance committee, stated that the report was not unanimous, and that the minority of the committee would claim a hearing at a future time. An exciting and protracted debate occurred in the House, on the bill for revising the rules of that body. A debate on the election laws is likely to spring up. The several committees are busily engaged in hearings on important proposals brought to their attention. The vote in the Committee on Commerce on reporting the Reagan inter-State commerce bill resulted in a tie, and it is thought that the bill will be beaten in full committee. It is also thought that the failure in the substitute bill, which involves the appointment of five officers of the Interior Department on the proposed Railroad Commission, will not be retained. A bill has been reported in the Senate from the judiciary committee, for the distribution of the unappropriated balance of the Geneva award. A minority report was promised. The House has received a large number of bills, which were duly referred. The principal occupation of the House has been debating the revision of the rules.

LEGISLATURE.

A very large amount of new business has been introduced in the Legislature. The Bell-Telephone bill has been advanced a stage or two. Walter Shanley asks for $200,000 compensation for his work on the Hoosac Tunnel. The Hampshire Agricultural Society protests in the Senate against the proposed transfer for the State Agricultural College to Amherst College. A great number of petitions have been presented in both branches, and numerous orders adopted. A new bill respecting the sale of liquors was introduced in the House. A larger amount of business was brought before the latter body on Tuesday than on Monday. The number of petitions and orders are pronounced "excessive." Among the most interesting bills are those for regulating the naming of streets in Boston; to control the construction of telegraph and telephone lines in Boston; a petition for the incorporation of an elevated railroad company; a bill to close in certain emergencies, places licensed to sell liquor; one to extempt from taxation deposits in savings banks invested in United States bonds; and a motion to reconsider the rejection of the bill to exempt mining companies from taxation, which was defeated.

INTER-STATE COMMERCE.

Recently, Mr. Charles Francis Adams, Jr., formerly one of the Railroad Commissioners of Massachusetts, was before the Congressional Committee on Commerce as a witness and expert in relation to matters involved in the Reagan bill for regulating the traffic between the States, particularly by railroad. Mr. Adams unhesitatingly and emphatically testified that there is no necessity for legislation in the case, which he said would be arbitrary, and dangerous as well as contrary to the spirit of our institutions. He said that ten years' experience as Railroad Commissioner and otherwise in Massachusetts warranted him in the statement that the railroad problem could be most effectually solved by public opinion, if it were only kept continually informed by a properly constituted railroad commission. In fact, it would excite surprise that any other situation was ever thought of.

He said that he had discovered in Massachusetts that all that was needed was an investigation and a subsequent thorough exposure of any evil complained of by the public, distinctly pointing out the individuals who were responsible for it. Public opinion could safely be left to do the rest. This very simple remedy has proved effective in the case of railway abuses in England, where public opinion works more slowly than here. A Commission clothed with the fullest power to investigate is the real remedy. The entire change of an inherited policy by Mr. Vanderbilt, in deference to public opinion on the subject of great monopolies, well illustrates the meaning of the statement. People will not, with a Commission, be making a raid on corporations, but be demanding the correction of specific abuses.

A bill quite different from that of Mr. Reagan has just been submitted to the House Commerce Committee, to regulate commerce between the States, and which was offered as a substitute for the Reagan measure. It provides for a board of five railroad supervisors, to consist of the Secretary of the Interior, Assistant-Secretary of the Interior, commissioner and engineer of railroads, and attorney-general for the department of the Interior. This board is to have power to investigate complaints in regard to transportation charges, made by any common carrier, for service affecting inter-State commerce, including passenger and freight and the safety of travel. They are required to report annually to Congress on the 1st of December, with such statements and suggestions regarding remedial legislation as they may think proper.

This new measure having been fully explained to the committee by its author, the latter appointed a sub-committee to draft and report to the full committee on Friday of the present week a substitute for the Reagan inter-State commerce bill, which shall provide for the creation of a Railroad Commission in accordance with the provisions of the new bill. The Reagan bill was likewise referred to a sub-committee for further perfection and final reporting to the full committee. Thus will one condition suggested by Mr. Adams be satisfied, namely, the establishment of a Railroad Commission to investigate complaints and abuses with a design to correct them by appropriate legislation.

New England Agricultural Society.—The annual meeting of the New England Agricultural Society was held in the Hall of the *Ploughman* Building, No. 45 Milk Street, on Tuesday, the 3d inst., the attendance being numerous and the proceedings earnest and spirited. Indeed, it would be difficult to find a Society of any kind that displays a greater amount of vigor and activity, or one that pursues its well-defined aims with more singleness of purpose. A detailed report of the proceedings of the meeting will be found in another column, and will not fail to be read with much interest by the entire agricultural community of New England. In addition to the customary details of business the Society considered the question of a location for the holding of the annual New England Fair, the invitation from the Worcester Agricultural Society being the only one as yet extended and the sentiment of the meeting greatly preponderating in favor of accepting it, provided satisfactory arrangements could be made with the Trustees.

The annual report of the Treasurer was submitted, showing a healthy condition of the Society's finances, and the agreeable fact that the Worcester Agricultural Society were not losers by guaranteeing the local expenses of the Fair of last year. After the business of the meeting was all transacted, an adjournment to dinner followed, which was partaken of by the members of the Society at Young's Hotel, to which place the meeting repaired in a body. The exercises there were of the most agreeable character, tending to cement friendships among those who had met only as acquaintances, or even as strangers. It was a happy and fitting conclusion to a good day's work, and its several features will be found more particularly described in the accompanying report in the present issue of the *Ploughman*. From this latest assemblage of the real elemental forces which manifest themselves later in the annual New England Agricultural Fair will go forth an influence over New England which will be acknowledged wherever it is known and felt.

The South Boston Flats.—A bill is before the Legislature, which was submitted by a joint commission composed of the Railroad Commissioners and the harbor and land commissioners, looking to the development of the Commonwealth's flats at South Boston and to the opening up of this valuable territory to the uses of general traffic. The bill provides for the connection of the railroad system of the State with these flats by means of a junction road and branches extending from the trunk lines, and rendering the terminal facilities thus provided on the flats accessible to all the roads alike. Each road is authorized to use its own motive power over the junction tracts and the connecting branches. This measure appears to secure the amplest terminal facilities, such as are enjoyed by other large cities, and places them on a liberal and practical basis, besides avoiding the features which led to the rejection of certain other measures last year.

The Canal Scheme.—The Isthmus is under survey by large bodies of men in the interests of M. de Lesseps, who is pushing matters with vigor. In respect to the international character of the projected canal, the *Panama Herald* says there is not the slightest disposition shown by the Colombian government to grant a concession for the construction of a canal to the citizens of one nation more than to those of another. It is regarded as an international affair, and no difficulty is expected in having that portion of the State of Panama which is embraced in the cities at the termini, and a reasonable scope of territory along the line of the canal, made into the neutral zone under a government guaranteed by the great powers and free to all; but so far as the Monroe doctrine is concerned, the people do not see its application, and would resent any serious interference from the outside world in that direction as an insult and an outrage.

The Coal Trade.—The anthracite coal trade is almost at a stand-still. The producing companies are practically selling no coal, and but little business is being done by middlemen or outside operators. The stagnation of trade is bitterly complained of by dealers. Not much improvement is expected before the opening of navigation, and there are various opinions as to the prospects of the trade thereafter. The present year is rather counted on as a good one, but a leading mine manager says there will have to be more wisdom shown on the part of the managers than there was last year, or there will be no improvement in price. He expressed the opinion that when the market becomes heavily stocked there should be a suspension of mining. The output of last year was a little over 26,000,000 tons; the stocks on the hands of the companies are about 1,000,000 tons; and the quantity in the hands of middlemen and dealers is enormously larger.

Another World's Fair.—A bill is to be presented to Congress, providing for the holding of a World's Fair in New York City in 1883, in commemoration of the 106th anniversary of the Treaty of Peace and of the recognition of American Independence. It provides for the appointment of two commissioners from each State, one from each Territory, one from the District of Columbia, and names 50 commissioners from the city of New York. It also provides other things to simplify the working of the plan, so as to avoid any troubles that might arise from a dual organization. The capital stock is placed at $12,000,000, in shares of $10 each. Foreign nations are to be invited by the Government to participate. No appropriations are asked for;

ANNUAL MEETING
OF THE
NEW ENGLAND AGRICULTURAL SOCIETY.

Boston, Tuesday, Feb. 3, 1880.

A Large and Enthusiastic Gathering.

HON. GEORGE B. LORING,
PRESIDENT.

HON. DANIEL NEEDHAM,
SECRETARY.

COL. GEORGE W. RIDDLE,
TREASURER.

VICE PRESIDENTS.

JOHN HALL, North Berwick, Me.
FREDERICK SMYTHE, Manchester, N. H.
GEORGE CAMPBELL, Westminster, Vt.
S. B. PHINNEY, Barnstable, Mass.
WILLIAM E. BARRETT, Providence, R. I.
E. H. HYDE, Stafford, Conn.

[*Phonographically Reported expressly for the Massachusetts Ploughman.*]

The annual meeting of the New England Agricultural Society was held in Boston at their headquarters, 45 Milk St., on Tuesday, February 3. The meeting was called to order by the Secretary, Hon. Daniel Needham, who read the notice by which the meeting was called. He then said: "I have received this morning a letter from the President of the Society, Dr. George B. Loring, which I will read:"

Letter of Dr. Loring to Col. Needham.

WASHINGTON, D. C., Feb. 1st, 1880.

"MY DEAR COLONEL:

"It would give me great pleasure to be present at the annual meeting of the New England Agricultural Society on Tuesday next; but my engagements and duties here are too absorbing. I trust your deliberations will be characterized by harmony and wisdom, and that the society will enter upon another year of its accustomed prosperity and usefulness. Truly yours,

GEO. B. LORING."

"HON. D. NEEDHAM, Boston."

Col. Needham then called Ex-Governor *E. H. Hyde*, of Connecticut, to preside over the meeting, and in his stead he would not say: "I must

WESTERN ADULTERATIONS.

We take the following from the Chicago *Tribune*:

Mr. George T. Angell of Boston has received the following letter from chemists and others interested in the investigations on the subject of food adulterations. The first is from Professor Clark:

CHICAGO, Oct. 18.—

No. 81 CLARK STREET, CHICAGO, Oct. 18.—*George T. Angell, Esq.*—Dear Sir: In answer to your questions, I would say that I have been a practical chemist to this city twenty-three years, a graduate of the Lawrence scientific school, am a graduate of Harvard University, chemical department of Harvard University, and was during two years assistant of Professor Horsford in the laboratory. I have devoted myself entirely to chemical analysis and have had much the largest chemical practice of any chemist in the West. At the request of a highly respectable citizen of Chicago, I have examined various brands of sugar, bought, as I understand, in this city; some granulated, some white, some yellow, some coarse and some fine. I have examined them thoroughly for impurities. In twelve of them I found, in the form of a chloride, the principle of the samples I found no trace. The other constituents I can state positively and entirely of glucose, which is a positive poison. I have examined several samples of raw cane sugar, and find in them chlorides of tin, calcium, iron and magnesia, and in quantities which made them very poisonous. In one case a whole neighborhood was poisoned, and I was told of one child who died in several cases found sugar of lead. I have in use no vinegar myself. I have my suspicion upon our vinegar. I use cider with suspicion upon our vinegar. I use no vinegar myself. I have my suspicion upon our vinegar. I use cider vinegar, and add to place of it,—lemon-juice, etc. I have also found in various cases of canned goods, which I have examined with lead and copper. I have never been poisoned with lead and copper. I have never been poisoned with the cheap tin ware sold in this city, to some extent in the country, and have no hesitation in saying to housekeepers and others, to have no hesitation in saying to housekeepers and others, to have no hesitation in saying to them, to have nothing to do with it. As a practical chemist I have been a pioneer in using fruits, vegetables and fish put up in tin cans of any kind, and I have no hesitation in saying to housekeepers and others

The Poet's Corner.

A VALENTINE.

Beware of one who loves thee but too well!
Of one who fain would bind thee with a spell,
With power to draw thee, as an unknown land
Lures the impassioned traveller to its strand.
Oh! if thou wouldst be free,
Beware of me!

Beware of eyes that softly fix on thee,
Tamed in their restless glances by thine own.
And of a voice, where all things that may be
In maiden hearts are told in every tone.
If thou would'st still be free,
Beware of me!

But if a longing, born within thy soul
Gives thee a far off glimpse of unknown bliss,
Then let thy love speed onward to its goal,
Nor thy true rest and joy for blindness miss.
If thou would'st not be free,
Then come to me!

—*Scribner for February.*

Ladies' Department.

Written expressly for the Massachusetts Ploughman

AUNT MABEL.

THE STORY OF A VALENTINE.

BY ELIZA F. MORIARTY.

"I never received but one valentine in my life," said Aunt Mabel, quietly.

"O, Aunt Mabel, you are joking! Kate and Minnie, do you think it possible that one of Eve's daughters could dance through her spring, glide gaily through her summer, and arrive at the verge of her autumn, with but one heart-throb of pleasure at the reception of a solitary valentine, sent by some faithless swain?"

The color flushed for a moment over the pale face of Aunt Mabel, and a slight trembling of the lips might have shown one more observant than her youthful questioner, that underneath that calm exterior lay hidden a deeper feeling. Aunt Mabel was seated near a window in an apartment luxuriantly appointed, and her inquisitor was standing before her examining a valentine of exquisite finish. Kate and Minnie, her younger sisters, were similarly engaged. Various were the exclamations of delight that burst from their lips as they drew forth from their lace envelopes the pretty trifles over which they blushed and smiled with girlish pleasure.

Aunt Mabel was unusually quiet. Perhaps that train of all others revived some painful memory, of which her happy nieces were unconscious. Excited over their valentines they certainly did not notice her dejection. A silence followed, during which May Derwent read for the twentieth time the rhymed effusion addressed "To my Valentine." At length that young lady looked up speaking more seriously now.

"But surely, aunt, you who are yet so handsome must have had more than one admirer. What kind of lovers were the beaux of twenty-five years ago? Why, it is the prettiest and easiest way in the world to let a lady know she is admired, and they say that Saint Valentine himself looks down indignantly on the lover who fails to send one of these tender missives on this his natal day. Now, aunt, do confess that you have had more than one cavalier at your feet. I know that I have heard father say more than once, that you remained single from choice, and that you preferred being—"

"An old maid," smiled Aunt Mabel, seeing her niece hesitate. "Go on, May; I am far from being offended at the title.

"An old maid, then," said her niece. "I've heard father say that you would sooner 'live forgotten and die forlorn,' like Tennyson's hapless maiden, than marry where your heart was not engaged."

"Your father spoke the truth, and I should advise my nieces to remain single forever, rather than wed where they did not love truly and faithfully."

"Old maids, indeed!" laughed blue-eyed Kate, making a deep courtesy in mock reverie. "Thank you, dear auntie, for the advice."

"Old maids!" echoed Minnie, waving a valentine on which sparkled frosted silver hearts and cupids. Come, Kate; mamma is [illegible] take us to drive on the park." The light-hearted girls hurried away.

May had not yet changed her position, and laying her valentine on the work table beside her aunt, she spoke in a pleading tone:

"Have you forgotten, aunt, that you promised me some time ago that when an opportunity occurred you would give me an account of your early life? You often tell me that I am too thoughtless. Perhaps I shall learn some beautiful truth from your experience that may guide me through the unknown trials of the future."

So Aunt Mabel allowed herself to be led to the low couch drawn up before the fire, that burnt cheerfully behind the polished grate, and with her niece nestling down lovingly beside her she commenced the recital so eagerly desired.

"Many, many years ago my mother was left a widow with two young children, your father and myself. Our poverty came suddenly upon us. My father was one of New York's wealthy merchants, but successive losses and an extravagant style of living soon diminished his means. Anxiety of mind and depression of spirits hurried him into an early grave, leaving his little family without any means of support. Remorseless creditors had no sympathy for the widow and orphans, and my mother was too proud to seek aid from the summer friends who had so often partaken of her hospitality. Forgotten and unknown she rented two wretched rooms in a miserable locality. Here she gained a scanty subsistance for herself and little ones by unwearied toil with her needle. For years we struggled on with barely enough to sustain us. Young as we were, we felt the change in our position bitterly, and chiefly on our poor mother's account. I can hardly bear to speak of such things now. We remembered well our elegant home in the suburbs, the luxury that surrounded us, and the servants that came and went at our bidding. No wonder the sad change threw a shadow over our young lives, but even that dark cloud, so long hanging over us, had its silver lining, and sorrow and want united us in a love that consecrated our lives to acts of mutual help and sympathy. How often afterwards did I recall my brother's words as we hurried on our way to school together.

"'Mabel,' he would say, 'poor mother is toiling for us now, so that we may not grow up in ignorance. I feel that when I grow up I shall be able to give her and you, my sister, a pleasant home, and money enough to supply all your needs.'

"His words sounded prophetic then, and I had faith in his ability to accomplish his loving intentions.

"Time passed on. At the age of sixteen my brother was taken into one of the largest importing houses in the city. This was our first step of advancement towards a better fortune. His promotion followed by rapid degrees, and possessing fine business talents and strict integrity, he won the confidence and esteem of his employers. Before four years he fulfilled his promise and gave his mother and sister a comfortable home. But, alas, our poor mother was now a confirmed invalid, and seldom left her room. I was constantly with her, and as I gazed upon her altered features, I felt that I could never repay all that I owed to her love and care. To look at her, to hear her voice, was happiness enough for me. Ah, May, I had no thoughts of valentines and love then. Living in strict retirement, I had few gentlemen acquaintances, and though my brother's chosen friends were pleasant and entertaining, there was not one among them that I would have fancied.

"Another year passed with little change, and the day that my brother attained his majority he was taken into the firm as a reward for his ability and faithfulness. Oh, how proud I was of my kind brother that day, and no girl ever had a kinder. But my joy was soon turned into mourning. A week after, my mother was laid to rest beside the husband that she loved so well.

The grief that I had suffered at her loss, and the long watching that I bestowed on her, had seriously impaired my health. My brother was about taking me to Havana before the winter set in, when I received an affectionate invitation to visit England, where my mother's only sister resided. I had never seen aunt Martha, who, a few years before my mother's marriage, was united to the secretary of the English Legation at Washington. She soon after accompanied her husband to his home in the neighborhood of Liverpool.

In the days when we had to grapple with poverty, my aunt sent us many a remittance from over the Atlantic. The sums that then proved such a blessing were not large, for at that time aunt Martha was not rich in worldly goods, though in after years some speculations in which uncle West was engaged proved so successful that he suddenly became the possessor of large means. They had one child, a daughter, who was the idol of her parents.

The invitation was readily accepted, though it was hard to part even for a few months from my brother, who became still dearer to me since death deprived me of my mother. As he stood on the deck of the steamer holding my hand in his he said,

"Mabel, our mother is no more—my sister now fills all my heart. God bless you, and restore you to health. In six months time I shall come for you, and let me find that the balmy English air will bring back the hue of health to your cheek again."

I could only put my arms around his neck and kiss him, tears choked the words that I would have spoken. So we parted.

I have nothing to say of my voyage, being confined to my berth during the greater part of the stormy trip. On my arrival at Liverpool I was met by my uncle, an agreeable, rosy-cheeked gentleman, with a mellow English voice, and much heartiness of manner. A short drive to the suburbs brought us to the pretty villa where my aunt and cousin were waiting to receive me. I seemed to see my mother again, so strongly did my aunt resemble her. My cousin Adele was a pretty blonde of eighteen, gentle, artless and winsome, and so warm was the welcome that I received from both, that I at once felt myself entirely at home.

Major Colton was one of the most esteemed visitors at the villa. The first night I met him, there was a large company present. I was sitting apart from the rest, and I felt that my sad, pale face and mourning dress formed a striking contrast to the sprightly looks and gay attire of the other young ladies present. Adele looked very attractive dressed in simple white muslin, with a single rose in her hair. She was seated at the piano surrounded by a group of enthusiasts, who listened delightedly to her fine singing. I scarcely heard her, for my thoughts were far away in my own loved land—far away was my heart, too, in a lonely churchyard. How hard I tried to keep the sudden tears of sorrow in my aching eyes, in vain, they found their way down my cheek.

"Do you play chess, Miss Derwent," said a quiet voice close to me.

I looked up and felt myself coloring at having my emotion seen by one who was almost a stranger to me. A few words on either side, and Major Colton had drawn a little table towards my retreat, and we commenced the game. I cannot tell how it was, but my reserve unconsciously vanished as the game proceeded, and before he checkmated me we were friends, drawn towards each other by that secret sympathy, that strange feeling of attraction, that binds heart to heart forever. When we parted for the night I gave him my hand, he raised it respectfully to his lips and was gone in another moment.

I must pass over the days and week which followed, for it adds another pang to memory to recall them. With a woman's intuition I soon knew that Major Colton loved me, and that he only waited for encouragement on my part to give expression to his feelings. At the same time came the discovery that Adele had become deeply attached to her father's guest.

Since I had been the life of all the pleasure parties, now grew dejected and silent, her step became slow, her cheek pale, and she soon seemed as if in a slow decline. Her parents were filled with grief and anxiety at the unaccountable change in their darling. Physicians prescribed in vain. To the surprise of all she refused to leave home and seek change of scene, which had been urged by her medical advisers. But they knew not that the charm that bound her there was the presence of Major Colton. Strange as it may seem that instead of confiding her secret to a loving mother, she turned to me for sympathy, and acknowledged all, saying in a piteous childlike way that without his love she could not live. Her arms enfolded me, her tears wet my cheek as she sobbed out this confession on my breast. Then, then I felt how truly I, too, loved Major Colton. But you are the first, May, who has heard my confession. I was but nineteen then, and a stranger might be surprised at the fancy of two young girls for a reserved and thoughtful man of thirty-five. He was spoken of as being cold in manner, but his friends found a peculiar charm in the tender kindness ever awarded to them. Could Adele have known the pain her every word inflicted on her hearer, her gentle heart would have broken beneath the burden of her secret, before she would have sought the blessed relief of sympathy in her sorrow.

From day to day, I saw my cousin pining away without hope, perishing as it were, before my eyes. What could I do but continue to bestow on her my tenderest sympathy, which she received with every emotion of gratitude.

The dawn of St. Valentine came, as it did so long ago, like a day set apart to the service of the god of love. How well I can recall every thing connected with that day. Adele and I were sitting together in the little boudoir that she called Sunny Nest. She looked wan and feeble, and as her head rested against my shoulder, and her large sweet eyes turned to me fondly, I felt that I could have made any sacrifice for her sake. She had received some dainty valetines as we sat there, but they seemed to give her no pleasure, and she laid them aside with a weary sigh. After awhile she laid down on a couch and dropped into an uneasy sleep.

It was a cold, gloomy day, the trees on the lawn were dripping with moisture, and a gathering fog obscured all distant objects.

"This is for you, Miss Mabel, I knocked twice but you didn't hear me."

I started from the revery into which I had fallen as the servant advanced and handed me a small white box, bearing my address in the somewhat peculiar hand writing of the major. It contained a beautiful lace envelope, which as I unfolded revealed a valentine. Yes, my first and only valentine. It was a simple design, wreath of blue forget-me-nots, in the centre of which was inscribed "To my Love"—and beneath in a trembling hand, "If there is any hope for me may it be revealed when next we meet."

Major Colton was unlike other men, and when he wrote these words he meant nothing else than offering a true and noble heart for the love I may give him.

Tears filled my eyes, tears of joy. I pressed the delightful missive to my lips and blessed the sender. Don't smile at what you may call my foolish enthusiasm. I had known very little happiness in my existence, and love to me was life. Besides, girls a quarter of a century ago, were much more impulsive and girlish in their manner than now.

A sigh from the couch awoke me out of my sweet dream. I started and with a beating heart turned towards Adele. She still slept. I gazed on the unconscious sleeper as if spell bound; my heart ached with pity at the sight of that wan face; my dream was over—love was not for me. Ever strong of will, then and there, I formed the resolution of sacrificing my happiness for my cousin's sake. I felt that I might be the means of driving sorrow from my aunt's door, and I determined at the cost of a breaking heart to make the endeavor. Seeing Adele stirring, I hurried to my chamber, turned the key in the lock, fell upon my knees and prayed for strength to bear me through the trial. I seemed to see the spirit of my mother smiling down upon me, and I rose up calm and resolved, yet, even then, I felt how hard it was to put that resolve into execution.

Major Colton called as usual that evening, but I pleaded illness to avoid meeting him. Adele, however, went down, delicate as she was, and his presence seemed to animate her with new life. In his absence she drooped again like a flower deprived of light.

When I again met Major Colton it was with a cold restraint on my part, while I avoided meeting his eyes, for I feared that mine would have betrayed me. He moved proudly away, sought my cousin's side, and from that moment as if by mutual consent we avoided each other. He seemed to resent my reserve and coldness, and he bestowed all those little graceful attentions, which are so pleasing to our sex, on Adele, and which hitherto had been accorded to me. I suppose he regretted sending me the valentine, which apparently caused the change in my manner towards him. What must he have thought of me? From the first I appeared to take a pleasure in his society, and when encouraged by this seeming interest of mine, he half expressed his devotion, I suddenly treated him with a chilling reserve that must have been humbling to his pride. I often turned over these things in my mind, and it added to the pain that I was silently enduring, that I forfeited his respect as well as lost his love.

One day my aunt took me kindly to task for excusing myself from joining in a pleasure party in which the major took an active part.

"I am at a loss," she said, "to discover the cause of your sudden dislike to Major Colton, whom we all hold in the greatest esteem."

I burst into tears and remained silent, for I knew not what to say. She looked at me earnestly, then putting back the hair from my forehead, she kissed me affectionately, and never again recurred to a subject that had evidently given her so much pain. But a little while after, as she and Uncle West strolled up and down the lawn in front of the library windows, near which I sat reading, a few words of their conversation reached my ears, words that pierced my heart like the sting of injustice.

"Mabel, poor child," said my aunt, "is, I fear, jealous of the Major's attentions to Adele."

I could not blame her for thinking so; my altered manner to her guest must have led her to form this supposition, and yet it was hard to bear.

Yes, Major Colton bestowed all his attentions on Adele now, though I think he did so at first more to let me see that I was an object of indifference to him than for any attachment he felt for my cousin. I am not vain, but I am sure that for a long time love was on Adele's side alone.

What a wonderful change had taken place in Adele's appearance; what a light in the eyes, what a changing rose on the cheeks, what a playful grace in her movements, as she went softly singing through the rooms. Ah, hope is a wonderful magician. He waves his magic wand and all is light and life, where before reigned gloom and desolation. The whole house rejoiced at the hastening recovery of its pride, and was I not already half repaid in seeing this?

One night when I was preparing to retire, Adele lingered in my chamber, chatting merrily, from an overflowing happiness, I fancied. "Dear cousin," she said, with a fond caress, as she was leaving me, "I begin to think that he does care for me at last; he said so many sweet and tender things this evening when we walked on the lawn together. But you are silent, darling, ah, tears, my cousin! What a sympathizing soul is yours." Then in a lower, softer tone, while the pink deepened on her cheeks, "I often think that Major Colton regards me as being childish and wanting in self-reliance, but dear cousin, if it should come to pass, if such happiness is to be mine, you shall be my bridesmaid."

I bore up as well as I could, but when she left me and my throbbing temples were pressed upon the cold pillows I besought Heaven's aid to sustain me in the approaching trial.

Strange did it appear that as each day made an improvement in Adele's health, so mine began visibly to fail. I had thought myself so strong of will, but when I saw how entirely the Major appeared to forget me, how devoted he seemed to be to my cousin, I was weak indeed. Alas! I feared that my aunt's conjectures were but too true, and that I was often jealous of Adele. But human nature is prone to fail, and after such communings my weakness a better feeling prevailed, and I rejoiced in the sweet girl's happiness.

I was soon spared furthur pain in witnessing the Major's total indifference to myself. It would have been a consolation to me then to have possessed his friendship, which he would not bestow on one who had evidently deceived him, one, who in his eyes must have been a heartless coquette, winning his affections to fling them in silent mockery aside.

The next steamer from New York brought my brother and his bride, your own dear mother, May, who, as you know was the only child of the senior member of the firm where my brother acquired so much wealth. They stayed but a few days in Liverpool before starting on their continental tour, and when they left I accompanied them, glad to escape from the scene where I had found my home and moulded my own future of loneliness. I ought not to speak so. I have found peace and rest underneath this roof, through all the quiet years that have intervened since then. Yet, my child, the heart has its yearnings that no philosophy can still—its regrets that time cannot wholly assuage—though the soul may grow strong in suffering there are moments when it is swayed by a hopeless sorrow to which it yields in very weakness.

Major Colton was absent from town when we took our departure, and I was thus spared the trial of looking any last upon one whom I could not help loving, and from whom I was so strangely separated.

We returned to New York in four months after, without again visiting Liverpool. We were staying at Florence when your mother received a letter informing her of the dangerous illness of her father, hastening our departure for home, but all too late; when we arrived in New York your grandfather was no more.

But it is growing late, it is time to dress for dinner. There is the carriage stopping at the door and your mother and sisters have returned from their drive.

"You have not told me all, aunt." Tears glistened in May's eyes as she spoke.

I have little more to say. The sad sequel can be told in a few words. Adele was married to the Major shortly after my return home." Aunt Mabel sighed deeply, and after a brief pause continued. "Alas, in one short year after, my poor cousin was laid in her grave, with her babe beside her. Her death must have been a great blow to her parents, who did not long survive her."

"And Major Colton, what became of him?"

"Some time after his name was prominent among the officers who had won distinction for military service, and for what civilization lauds as valor. I have not heard of him since."

"Aunt Mabel, do you care for him yet?" asked May earnestly.

At this moment Mrs. Derwent entered, a pleasant smile on her handsome face as she said gaily, "I have news for you, Mabel, Herbert is to bring home an old friend of yours to dine and spend the evening, Major Colton, ah, I should have said Colonel Colton, for he holds that rank now. He is on his way to Canada where his regiment is quartered."

May listened, her large eyes opening wider with wonder—and something else besides. Still later in the day that young lady watched the meeting between aunt Mabel and Colonel Colton, but she was not surprised as were her parents at the formal politeness on either side. No one indeed, would have suspected that deep emotion lay hidden under that cold exterior, and that both throbbing hearts were young again under the spell of a dream that never dies.

The Colonel was a tall, fine looking hero, bronzed, handsome and gray, with manners more sociable and pleasing than in his younger days. May and he were soon on the best of terms. She had her own motives for engaging his attentions to herself, and during the evening she drew him aside to a table where her aunt was seated, to all appearances deeply occupied in overlooking some engravings. An arch smile flitted over May's face as she said—

"Should you like to look at my valentines, Colonel?"

She spoke with that freedom which beauties of seventeen sometimes assume, and as she placed them before him, she added with another arch smile—"Did you ever send a valentine, Colonel?"

"Yes, once," he replied sharply, while he unconsciously crushed the pretty trifle he held in his hand. But his tormentor went on.

"Aunt Mabel never received but one valentine, and that was many years ago, yet she treasures it as something sacred."

The pleading look in aunt Mabel's eyes silenced her, and had the elder lady remained in the room she would have said no more. But fate willed it otherwise. The Colonel noticed that look of entreaty and the blush that accompanied it. His eyes fondly followed the retreating form when May said half penitently,

"I can hardly forgive myself for deviding her secret, confided to me this morning."

"What do you mean, child?" the Colonel asked with increasing agitation.

"It is too late to retreat now, Colonel," she answered, the arch smile still playing around her dimpled cheeks." Aunt Mabel loved the one who sent her that valentine. But you yourself must ask her for an explanation. I have said too much already.

The Colonel did ask for an explanation that night. The result was that aunt Mabel went as a happy bride to Canada.

HOW RUSSIAN WOLVES CAPTURE WILD HORSES.

Whenever wolves associate together for mischief, there is always a numerous train of smaller ones to follow in the rear and act as auxiliaries in the work of destruction. Two large wolves are sufficient to destroy the most powerful horse, and seldom more than two ever begin the assault, although there may be a score in the gang. It is not less curious than amusing to witness their ingenious mode of attack. If there is no snow or but little on the ground, two wolves approach in the most playful and caressing manner, lying, rolling, and frisking about, until the too credulous and unsuspecting victim is completely put off his guard by curiosity and familiarity. During this time the gang, squatting, are looking on at a distance. After some time spent this way, the two assailants separate, when one approaches the horse's head, the other his tail, with a shyness and cunning peculiar to themselves. At this stage of the attack their frolicsome approaches become very interesting. The former is a mere decoy; the latter is the real assailant and keeps his eyes steadily fixed on the hamstrings or flanks of the horse. The critical moment is then watched, and the attack is simultaneous. Both wolves spring at their victim at the same instant—one at the throat, the other to the flank—and, if successful, which they generally are, the hind one never lets go his hold till the horse is completely disabled. Instead of springing forward or kicking, to disengage himself, the horse turns round and round, without attempting a defense. The wolf before then springs behind, to assist the other. The sinews are then cut, and in half the time I have been describing it the horse is on its side. His struggles are fruitless. The victory is won. At this signal the lookers-on close in at a gallop; but the small fry of followers keep at a respectful distance until their superiors are gorged, and then they take their turn unmolested.

APPLE-TIME.

Shower-time, flower-time,
Earth is new and fair;
May-time, hay-time,
Blossoms every where;
Nest-time, best-time,
Days have long grown;
Leaf-time, brief time,
Make it all your own;
Berry-time and cherry-time,
Songs of bird and bee;
But, of all the gay times,
Apple-time for me!
Wheat-time, sweet-time,
In the closing y[illegible]
Sheaf-time, leaf-t[illegible]
Now will disappear,
Ice-time, nice-time,
For a merry lad;
Snow-time, blow-time,
Earth is lone and sad.
Yellow ones and mellow ones;
Rusty coats and pippins;
Apple time for me.

—*Nursery.*

THE PROUD LADY OF THE CASTLE.

[Harper's Weekly.]

Last of the mighty race of Windeck, famed for brave men and lovely women, was Adelheid, heiress of the castle and broad lands that had been owned by her ancestors, and, so far as beauty went, she was worthy of her lineage, but of a proud and haughty temper. So proud was she that among all the nobles of Brisgau she could find none whom she thought worthy to call her lord; and year after year passed on, finding her still unwedded, and every year some unfortunate lover or other turned from the castle gates with looks of scorn and words of ridicule.

Among those whom she should, after her fashion, first attach to her by every art, afterward repelled with bitter derision, was a young man of noble family but slender fortune, who had long been in her service as page or squire, as the fashion of those days demanded.

After years of patient waiting and hope, the youth ventured to declare himself, and was received by the lady with a storm of sarcasms that literally overwhelmed him. Stung to the heart by her hard speeches, and by the sense of his own folly and presumption, which suddenly poured in upon him like a flood, he left his mistress's presence only to write a word of farewell to his mother, whose son he was, and whom he tenderly loved, then threw himself into the Rhine.

She who had been the life of all the pleasure parties, now grew dejected and silent, her step became slow, her cheek pale, and she soon seemed as if in a slow decline. Her parents were filled with grief and anxiety at the unaccountable change in their darling. Physicians prescribed in vain. To the surprise of all she refused to leave home and seek change of scene, which had been urged by her medical advisers. But they knew not that the charm that bound her there was the presence of Major Colton. Strange as it may seem that instead of confiding her secret to a loving mother, she turned to me for sympathy, and acknowledged all, saying in a piteous childlike way that without his love she could not live. Her arms enfolded me, her tears wet my cheek as she sobbed out this confession on my breast. Then, then I felt how truly I, too, loved Major Colton. But you are the first, May, who has heard my confession. I was but nineteen then, and a stranger might be surprised at the fancy of two young girls for a reserved and thoughtful man of thirty-five. He was spoken of as being cold in manner, but his friends found a peculiar charm in the tender kindness ever awarded to them. Could Adele have known the pain her every word inflicted on her hearer, her gentle heart would have broken beneath the burden of her secret, before she would have sought the blessed relief of sympathy in her sorrow.

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"May I inquire," he said, "are you, fair lady, the daughter of this house?"

"Yes," was the answer given, as it seemed, sadly and low.

"And your parents?"

"They are there," said the lady, pointing to the pictures on the walls.

"Do you mean to say that you live in this house alone?" asked von Stein.

"Alone," returned the lady. I am the last of my race."

Who shall say how it came about? The lady was beautiful, the man was young. In such cases love is sometimes found to be a plant that does not take long in growing. Moreover, Von Stein, though noble, was poor, and the lady the last of her race, the heiress of an ancient lineage. Possibly the notion of the inheritance the lonely girl might bring with her had some part in the sudden passion which filled the young man's heart. Who can tell?

It was not long before he found himself kneeling at her feet and offering the beautiful maiden all that he had to offer—his devotion and his life.

The lady listened silently, and with bowed head to his ardent pleading. Then she said, looking up, but away from him, and speaking absently, "I have heard those words before."

"But never from lips so true, so honest, so disinterested," said the young man, warmly, forgetting in his fascination for the beautiful lady how he certainly had taken her inheritance into account in the first place.

The lady sighed and was silent.

Then she spoke: "If I yield to your wishes we must be married at once."

"At once!" cried Von Stein, perhaps a little startled. Yet what lover ever found the time between betrothal and marriage too short. "I am ready," he said gallantly, "and impatient."

The lady smiled, moved softly away to an old worm-eaten chest which was set against the wall, took from it two rings and a white veil and crown of myrtle, which she laid upon her dark flowing hair. Her dress was white.

"Come," she said to her lover, and led the way.

A little bewildered, after the fashion of bridegrooms in general, and scarcely knowing whether to be happy or ashamed, the young man followed his bride through, as it seemed to him, miles of dimly-lighted vaulted passages, where the damp was trickling down the walls, and where unthought-of steps up and down were ready at every moment to trip up the unwary passer. The lady, however, seemed to be well acquainted with every turn and twist of the place, and giving her hand to her lover she led him on step by step until at length they reached a vaulted chamber, which they had no sooner entered than a great iron door shut heavily behind them with a sound that echoed through every arch of the dimly-lighted building.

It was the chapel.

"Your hand is cold, my love," said the young man, tenderly, to his bride.

"No matter; yours has warmth and life enough for both." returned the lady.

Yet the life seemed actually to ebb from the young man's heart as he observed the stone figure of a bishop, which was sculptured on a grave stone in the centre of the chapel, gradually rise from its recumbent position and walk up the steps of the altar.

The eyes of the bishop flamed like glow-worms, the candles upon the altar lighted of themselves, and the tones of the organ rolled solemnly through that vaulted building.

"Kurt von Stein, wilt thou take the lady of Windeck for thy lawful wife?" said the Bishop, in a low, sepulchral tone, which sounded as though not he, but some muffled voice a dozen yards away, were speaking.

At this moment the whole horror of the scene seemed to break upon the young man. Around him, slowly rising from their graves, he saw the shrouded forms and fleshless faces of the dead, who came as witnesses to the ghostly marriage. Even the face of his bride, as his fascinated eyes fixed upon it, wore the livid hue of death. He turned in an agony to fly from the horrible scene, tried to snatch his hand from the cold, hard grip of the phantom lady, fell, as he believed, senseless upon the chapel floor—and awoke to find himself, at the dawn of day, lying at his full length on the moss grown stone where he had sat to rest the night before, at the castle door, and his horse intent upon an early meal on the rank herbage of the grass-grown court.

When he told his tale in the village and at the neighboring castles no one in the least doubted that he had almost, if not quite, laid the unquiet spirit of the Lady of Windeck.

Sculptors of Life are we, as we stand with our
lives uncarved before us,
Waiting the hour, when at God's command, our
life-dream passes o'er us.
Let us carve it, then, on the yielding stone, with
many a sharp incision—
Its heavenly beauty shall be our own—*our lives*
that angel vision.

—*Emerson.*

ICE MADE BY MEANS OF ETHER.

It is well known that ether can be made to vaporize so speedily as to produce intense cold, and if, when covered with water, its evaporation be assisted, it will escape so quickly as to lower the temperature of the water to freezing point. Hence ether is often used in preparing freezing mixture; and a machine has lately been constructed for making ice by means of the remarkable property to which we have briefly alluded. The apparatus consists of an engine and air-pump combined on the same bed-plate, a refrigerator, an ether condenser, a circulating pump, and one or more ice-boxes according to the quantity required—a steam engine supplying the motive power. The two inlet passages of the air-pump are connected by a copper pipe, from which branches another copper pipe that places them in communication with the refrigerator, which is a felt-covered vessel of cylindrical shape, the tubes being made of copper and riveted to brass end-plates. The two outward valves on the other side of the air-pump communicate with the ether condenser, which is similarly constructed to the refrigerator. The tubes communicate at each end with metal chambers, one of which serves as a receptacle for the air that enters the condenser. The whole is immersed in a wooden tank, through which a stream of water constantly passes for cooling and condensing the ether vapor. A vacuum is maintained by the air-pump in the refrigerator, vaporising the ether at a low temperature. This operation causes an absorption of heat, which reduces the temperature of the strong brine that is made to circulate through the tubes and ice box. The ice box is a tank of red deal, varnished inside, with partitions with holes in them to allow a slow circulation of the brine. Fine moulds of different widths, according to the shapes of the blocks of ice required, are filled with pure water and suspended between the partitions.

AGRICULTURAL SCHOOLS FOR GIRLS.

France has several agricultural schools for girls. One near Rouen was begun by a Sister of Charity on a capital of one franc. Her first pupils were two little girls, just discharged from prison. The school now has a capital of $160,000 and trains 300 girls, ranging from six years of age to eighteen:

The farm, entirely cultivated by them, is over 400 acres in extent. Twenty-five Sisters form the staff of teachers. More than one medal of the French Agricultural Society has been awarded to this establishment at Darnetel, and the pupils are in great demand all over Normandy on account of their skill. They go out as stewards, gardeners, farm-managers, dairy-women and laundresses. Each girl has on leaving an outfit and a small sum of money, earned in spare hours. If they want a home, they can always return to Darnetel.

SCOTCH COURTSHIPS.—Surely never was a declaration made in quainter fashion, saving perhaps by the Scotch beadle who led the manse housemaid to the churchyard, and pointing with his finger, stammered: "My folk lie there, Mary; wad ye like to lie there?" It is plain the notion did not scare her, any more than it did the Galloway girl, who, when Jack, coming into the kitchen while she was preparing breakfast, said, "I think I'll marry ye, Jean!" answered, "I would be muckle obliged to ye if ye would!" and so concluded the bargain; not even stipulating, like another ready lassie on accepting as sudden an offer. "But ye maun gie me my dues o' courtin' for a' that, Jamie."

—*Chamber's Journal.*

☞ The leap-year privilege of ladies choosing their husbands is explained in a work entitled "Love, Courtship and Matrimonie," London, 1606. "Albeit it has now become a part of the common lawe in regard to social relations of life, that, as often as every bissextile year dothe return, the ladyes have the sole privilege during the time it continueth of making love unto the men, which they doe, either by words or lookes as to them it seemeth proper; and, moreover, no man will be entitled to the benefit of clergy who doeth in any way treat her proposal with slight or contumely."

Correspondence.

NOTES ON EUROPEAN TRAVEL.

NUMBER LIII.

BY T. W. SILLOWAY, A. M.

Special Correspondence of the Mass. Ploughman.

ENGLAND—CONTINUED.

LONDON, &C.

We are now, at 10,30 A. M., on this June 13th., back in London, after a ride of two hours from Cambridge. The old charm of London still remains. I believe it never would grow old. We have two days now left, before we start for the continent, and employ them to the best advantage we can. The first and very natural act is, to go immediately to our banker's in Philpot Lane, for letters and papers from home, and also to obtain some of that, which one of old thought the love of which was the root of all evil. Next home to our old lodgings at No. 46 Woburn Place, for reading our documents, replies, etc., next an omnibus ride down through High Holborn to Newgate street and alight near St. Paul's. It's full time that we go there again, and to worship in our own way. Delighted, even more than at first, we find ourselves unable to comprehend it. First views are never as comprehensive as later ones. A feast of contemplation here, and then a walk out through Cheapside, to view once more the

FIRE MONUMENT.

It stands in Fish street and was built to commemorate the great fire of 1666. In design it is first, a great platform, on which is an enormous pedestal 21 feet square, with a moulded base 28 feet square. It has a grand projecting cornice, and all, to the top of this is 40 feet high. On the top of this section is a Roman Doric column, and above all is a large vase or sort of urn, with what was designed to represent a flame issuing out of its top. The flame is gilded, and the entire monument is 215 feet high, or but five feet less than our Bunker Hill Monument. It is so located, that should it be laid down lengthwise in a certain direction, extending from its present location, it would exactly reach the spot at which the fire originated in Pudding Lane, and here we stop by the way to remark, that in London, the idea,—and no bad one,—prevails of retaining the old familiar names. *Philpot Lane* is yet the cognomen for the place of eminent bankers. *Mincing Lane* is the seat for certain kinds of merchandise traffic. Fish street retains its name as at the time of the fire, and Piccadilly, Cheapside, Paternoster Row, High Holborn, and Crutched Friars are to us Americans as common as household words. The monument is built of the white Portland and stone like St. Paul's cathedral, and inside, Bunker Hill Monument-like, are circular stairs 345 in number leading to the iron gallery around on top of the capital of the great column. This gallery was inclosed some years ago with iron work from the top of the rail, up some 8 feet, and covered at the top, forming an iron cage to prevent people from throwing themselves off with suicidal intentions as was at times done. The great pedestal at the base contains in its four panels bas reliefs, commemorative of the fire and things connected with the structure's erection. The monument is open daily, and for a small fee visitors are admitted to the gallery cage, from which very commanding views are had of the larger part of Old London, as well as the river Thames, and many of the outlying places in all directions. As from the top of the cathedral, an inexpressible charm exists, and one is in raptures as he views and contemplates this largest city of the world, and more than two thousand years old spread out about below him; and how as by magic comes the thought, that from this lofty height, and very elevated position, kings queens, the most renowned of the old world and the new have, as we are doing, looked out upon, and have in admiration been lost in contemplation of the scene!

The monument was from designs furnished by Sir. Christopher Wren. It was begun in 1671, and finished in 1677, or 203 years ago. It is justly esteemed as the noblest column in the world, being 24 feet higher than the Trajan column at Rome. Next a walk to London Bridge, where as Pepys would have said, "by boat to Westminster." As stated in our other article on London, this is an exceedingly pleasant way to travel from one part of London to the other, the boats ply often, and thousands thus travel. And next, another tour through the grand old Abbey, and about the vicinity of Parliament House and Westminster Bridge, and so the day was well filled up. As at first, very interesting are these London rambles.

Friday A. M. breakfasted, and we are ready to take steam cars for the famed and well known city of

WINDSOR,

for which we started at 9 A. M. The ride of 23 miles is out through well cultivated lands. The best of England are these fine suburbs. For 2,000 years have these same fields been cultivated, and in use, but they seem new, and as virgin soil to-day. They are not povertized by continual takings off, and no returns, but manures are applied, constant attention is paid, and grand results come. At length arrived, we find we are in the pretty rural city, with a population of 11,769. It is situated on the right bank of the Thames, on sloping land, and presents a very neat appearance, with a smart business-like condition everywhere apparent. The streets are well paved and lighted, and while there is little that is antique to be seen, yet it is very interesting from its look of substantial and finished appearance. Here, at the seeming centre of the place, or at least in the midst of a solid population, is the famed

WINDSOR CASTLE,

and of course this is what we have especially come to see. It is the principal residence of the Queen, and the buildings cover 12 acres of ground, being surrounded by a terrace on three sides, which is 2500 feet in length. They stand in an enclosure called "The little Park," which is 4 miles in circumference, and connected on the south by a long and remarkably fine avenue of trees with the "Great Park," which is 18 miles in outline, and then again west of this is the *Windsor Forest*, having a circuit of 56 miles. Windsor has long been a seat of residence for royal blood, for here resided the Saxon kings before the Norman conquest. The present castle however is less ancient, as it was founded by William the conqueror, who died Sept. 9. 1087. He was the first king of the Norman dynasty. It was, however, largely rebuilt by order of Edward III., under the supervision of William of Wykeham, the celebrated Bishop of Winchester, and who was architect of the remarkably elegant nave of his cathedral. He died Sept. 24, 1404. The antiquity of the castle are from these dates readily seen, and we may here add that one of the reasons which have induced us to so often in these articles give dates of the death of important individuals, was to enable the reader to have data as regards the age of buildings, or of the time of occurrence of events narrated. Various repairs were made after that, but so far as general arrangement and design are concerned, no changes were made for centuries, and they so continued till 1824–8, when new work was done and all put in complete condition under the superintendence of Sir Jeffrey Wyatville. Visitors are freely admitted